AMENDMENTS TO THE CLAIMS

1-76. **(Canceled)**

77. **(Previously Presented)** The method according to claim 133, wherein the foreign T_H epitope is immunodominant in the animal.

78. **(Previously Presented)** The method according to claim 133, wherein the foreign T_H epitope is promiscuous.

79. **(Previously Presented)** The method according to claim 78, wherein the at least one foreign T_H epitope is selected from a natural promiscuous T-cell epitope and an artificial MHC-II binding peptide sequence.

80. **(Previously Presented)** The method according to claim 79, wherein the natural T_H epitope is selected from the group consisting of a Tetanus toxoid epitope such as P2 or P30, a diphtheria toxoid epitope, an influenza virus hemagluttinin epitope, and a *P. falciparum* CS epitope.

81 - 84. **(Cancelled)**

85. **(Previously Presented)** The method according to claim 133, wherein the T_H epitope-containing IL5 polypeptide comprises a foreign T_H epitope in at least one of loops 1-3 or in the amino acid residues C-terminal to helix D, said loops and said helix D corresponding to those shown in Fig. 3 for human and murine IL5.

86. **(Previously Presented)** The method according to claim 85, wherein the IL5 polypeptide is a human IL5 polypeptide.

87. **(Previously Presented)** The method according to claim 86, wherein the human IL5 polypeptide has been modified by substituting at least one amino acid sequence in SEQ ID NO: 1

with at least one amino acid sequence of equal or different length thereby giving rise to a foreign T_H epitope, wherein substituted amino acid residues are selected from the group consisting of residues 87-90, residues 88-91, residues 32-43, residues 33-43, residues 59-64, residues 86-91, and residues 110-113.

88. **(Cancelled)**

89. **(Previously Presented)** The method according to claim 133, wherein the T_H epitope-containing IL-5 polypeptide is administered together with an adjuvant which facilitates breaking of autotolerance to autoantigens.

90. **(Previously Presented)** The method according to claim 89, wherein the adjuvant is selected from the group consisting of an immune targeting adjuvant; an immune modulating adjuvant; an oil formulation; a polymer; a micelle forming adjuvant; a saponin; an immunostimulating complex matrix (an ISCOM matrix); a particle; DDA; aluminium adjuvants; DNA adjuvants; γ-inulin; and an encapsulating adjuvant.

91. **(Previously Presented)** The method according to claim 133, wherein an effective amount of the T_H epitope-containing IL5 polypeptide is administered to the animal via a route selected from the parenteral route such as the intradermal, the subdermal, the intracutaneous, the subcutaneous, and the intramuscular routes; the peritoneal route; the oral route; the buccal route; the sublinqual route; the epidural route; the spinal route; the anal route; and the intracranial route.

92. **(Previously Presented)** The method according to claim 91, wherein the effective amount is between 0.5 μg and 2,000 μg of the IL5 analogue.

93. **(Previously Presented)**The method according to claim 91, which includes at least one administration of the IL5 analogue per year.

94. **(Previously Presented)**The method according to claim 91, wherein the IL5 analogue is contained in a virtual lymph node (VLN) device.

95. **(Previously Presented)** The method according to claim 90, wherein said immune modulating adjuvant is a member selected from the group consisting of a toxin, acytokine and a mycobacterial derivative.

96-99. **(Cancelled)**

100. **(Previously Presented)** A method for treating asthma or other chronic allergic conditions characterized by eosinophilia, the method comprising administering to a patient in need thereof an immunogenically effective amount of

- at least one T_H eptitope-containing IL-5 polypeptide wherein said T_H eptitope-containing IL-5 polypeptide differs from the animal's autologous IL-5 polypeptide in that the T_H eptitope-containing IL-5 polypeptide comprises at least one foreign T_H eptitope inserted into the amino acid sequence of the animal's autologous IL-5 polypeptide, whereby immunization of the animal with the T_H eptitope-containing IL-5 polypeptide produces antibodies against the animal's autologous IL-5 polypeptide and whereby said T_H eptitope-containing IL-5 polypeptide reacts to the same extent with an antiserum raised against the animal's autologous IL-5 as does the autologous IL-5 .

101-132. **(Cancelled)**

133. **(Currently Amended)** A method of *in vivo* down-regulation of interleukin 5 (IL5) activity in an animal, including a human being, the method comprising administering an immunogenically effective amount of

- at least one T_H eptitope-containing IL-5 polypeptide wherein said T_H eptitope-containing IL-5 polypeptide differs from the animal's autologous IL-5 polypeptide in that the T_H eptitope-containing IL-5 polypeptide comprises at least one foreign T_H eptitope ~~proposed~~ introduced into the amino acid sequence of the

animal's autologous IL-5 polypeptide, whereby immunization of the animal with the T_H eptitope-containing IL-5 polypeptide produces antibodies against the animal's autologous IL-5 polypeptide and whereby said T_H eptitope-containing IL-5 polypeptide reacts to the same extent with an antiserum raised against the animal's autologous IL-5 as does the autologous IL-5.

134 – 141. **(Cancelled)**